## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A heat exchanger plate comprising a number of turbulence-promoting protuberances which project from the plane of the heat exchanger plate, the protuberances being spaced apart from each other by a substantially flat base portion at a bottom of the heat exchanger plate.

wherein each of the protuberances has ~~an isolated zone with~~ a surface profile extending over substantially the whole surface of the protuberance for promoting break-up of laminar boundary layers, and the surface profile has spherical or ellipsoid segments.

2. (Previously Presented) The heat exchanger plate as claimed in claim 1, which together with a plurality of identical heat exchanger plates is stackable in such a manner that the protuberances in a first heat exchanger plate are partially accommodated in the protuberances in a second heat exchanger plate.

3. (Previously Presented) The heat exchanger plate as claimed in claim 1, in which the protuberances are symmetrically arranged.

4. (Previously Presented) The heat exchanger plate as claimed in claim 1, in which the surface profile has a profile depth that is considerably smaller than the depth of the protuberances.

5. (Previously Presented) The heat exchanger plate as claimed in claim 1, in which the surface profile is concavely or convexly arranged relative to the protuberances.

6. (Previously Presented) The heat exchanger plate as claimed in claim 1, in which the geometric transition between the plane of the heat exchanger plate and the protuberances is provided with a radius.

7. (Previously Presented) The heat exchanger plate as claimed in claim 1, in which the surface profile together with the protuberances forms a golf-ball-like structure.

8. (Currently Amended) A plate heat exchanger comprising heat exchanger plates with turbulence-promoting protuberances which are arranged in each heat exchanger plate, the protuberances being spaced apart from each other by a substantially flat base portion at a bottom of a corresponding one of the heat exchanger plates,

wherein each protuberance has ~~an isolated zone with~~ a surface profile extending over substantially the whole surface of the protuberance for promoting break-up of laminar boundary layers, and the surface profile has spherical or ellipsoid segments.

9. (Previously Presented) The plate heat exchanger as claimed in claim 8, in which the heat exchanger plates are arranged so that the protuberances in a first heat exchanger plate in connection with stacking are partially accommodated in the protuberances in a second heat exchanger plate.

10. (Previously Presented) The plate heat exchanger as claimed in claim 8, in which the heat exchanger plates are arranged in pairs with a first pair of plates and a second pair of plates adjoining the first, in which pairs of plates a first and a second plate are arranged with the protuberances directed away from each other and in which pairs of plates a gap is arranged between the first and the second plate.

11. (Previously Presented) The plate heat exchanger as claimed in claim 8, in which the protuberances in each heat exchanger plate are symmetrically arranged.

12. (Previously Presented) The plate heat exchanger as claimed in claim 8, in which the surface profile has a profile depth which is considerably smaller than the depth of the protuberances.

13. (Previously Presented) The plate heat exchanger as claimed in claim 8, in which the surface profile of each protuberance is concavely or convexly arranged relative to the protuberance.

14. (Previously Presented) The plate heat exchanger as claimed in claim 8, in which the protuberances together with the surface profile form a golf-ball-like structure.

15. (Cancelled)

16. (Currently Amended) The heat exchanger plate as claimed in ~~claim 15~~claim 1, wherein the ~~isolated zones~~ protuberances are spherical or ellipsoid.

17. (Cancelled)

18. (Currently Amended) The heat exchanger plate as claimed in ~~claim 17~~claim 8, wherein the ~~isolated zones~~ protuberances are spherical or ellipsoid.

19. (Previously Presented) The plate heat exchanger as claimed in claim 9, wherein the protuberances of the first heat exchanger plate are smaller than the protuberances of the second heat exchanger plate.